

U.S.S.N. 10/786,187

Claim Amendments

Please amend claims 1, 9, and 16 as follows:

Listing of Claims

1. (currently amended) A method of re-exposing alignment marks on a substrate through an upper surface of said substrate during semiconductor device fabrication having at least one transparent dielectric layer overlaying the alignment marks and at least one opaque layer overlaying the at least one transparent dielectric layer, comprising the steps of:

providing a substrate with alignment marks;
forming at least one opaque layer overlaying the alignment marks; and

providing a focused ion beam;
rendering visible the alignment marks by impinging said
a focused ion beam against the at least one opaque layer to
obliterate the at least one opaque layer substantially overlaying
the alignment marks; and

leaving at least a portion of the at least one
transparent layer intact over the alignment marks.

2. (Original) The method of claim 1 wherein said focused ion beam has a noble gas ion source.

3. (Previously presented) The method of claim 1 wherein said

focused ion beam has a current density of about 400-800 pA.

4. (Original) The method of claim 3 wherein said focused ion beam has a noble gas ion source.

5. (Original) The method of claim 2 wherein said noble gas ion source comprises argon.

6. (Previously presented) The method of claim 5 wherein said focused ion beam has a current density of about 400-800 pA.

7. (Original) The method of claim 4 wherein said noble gas ion source comprises argon.

8. (Previously presented) The method of claim 7 wherein said focused ion beam has a current density of about 400-800 pA.

9. (currently amended) A method of fully re-exposing alignment marks on a substrate through an upper surface of said substrate during semiconductor device fabrication, said substrate upper surface comprising having at least one transparent dielectric layer overlaying the alignment marks and at least one opaque layer overlaying the at least one transparent dielectric layer,

comprising the steps of:

providing a focused ion beam;

cutting an exposure opening in the at least one opaque layer to render visible the alignment marks by impinging said focused ion beam against the at least one opaque layer; and

leaving the at least one transparent layer intact over the alignment marks.

10. (Original) The method of claim 9 wherein said focused ion beam has a noble gas ion source.

11. (Previously presented) The method of claim 9 wherein said focused ion beam has a current density of about 400-800 pA.

12. (Original) The method of claim 11 wherein said focused ion beam has a noble gas ion source.

13. (Original) The method of claim 10 wherein said noble gas ion source comprises argon.

14. (Previously presented) The method of claim 13 wherein said focused ion beam has a current density of about 400-800 pA.

15. (Original) The method of claim 12 wherein said noble gas ion source comprises argon.

16. (currently amended) A method of fully re-exposing alignment marks on a substrate through an upper surface of said substrate during semiconductor device fabrication, said substrate upper surface comprising having a transparent dielectric layer overlaying the alignment marks and at least one opaque layer overlying the dielectric layer, comprising the steps of:

providing a focused ion beam;

cutting an exposure opening in the at least one opaque layer to the dielectric layer to render visible the alignment marks by impinging said focused ion beam against the at least one opaque layer;

leaving at least a portion of the dielectric layer intact over the alignment marks; and

viewing the alignment marks through the exposure opening and the dielectric layer.

17. (Original) The method of claim 16 wherein said focused ion

beam has a noble gas ion source.

18. (Original) The method of claim 16 wherein said focused ion beam has a current density of about 200-800 pA.

19. (Original) The method of claim 17 wherein said noble gas ion source comprises argon.

20. (Original) The method of claim 19 wherein said focused ion beam has a current density of about 200-800 pA.